

Amendments to the Specification:

Please amend the title on page 1 as indicated:

METHOD AND APPARATUS FOR PERFORMING A STABLE HASH-BASED MAPPING COMPUTATION IN CONSTANT TIME OVER FOR A DYNAMICALLY VARYING TARGET SET OF COMPUTATIONAL RESOURCES

Please amend the specification at page 1, lines 9-14, as indicated:

The present invention relates to enhancing data access and control in an improved data processing system ~~and, in particular, to a method and apparatus for enhancing data access and control~~. Still more particularly, the present invention provides ~~a method and apparatus~~ for resource optimization in data processing systems via a stable hashing mechanism.

Please amend the specification at page 7, lines 1-5 as indicated:

The present invention ~~is a method, system, apparatus, or computer program product for~~ discloses the mapping of a source identifier in a source identifier space to a target identifier in a target identifier space using a stable hash-based computation.

Please amend the specification at page 20, lines 3-22 as indicated:

Figure 4A depicts a process for initializing the target Map data structure. The process begins by obtaining initial target descriptors for the initial set of targets (step 402). There may be one or more targets in the initial set of targets, each of which is described in an object termed a "target descriptor". A target descriptor may contain any information that is associated with a given target, such as one or more target identifiers, its target weight, and other information. A target identifier may be, without any limitation, a number, an ASCII string, a name, a network physical address, a Uniform Resource Identifier, or some other form of identifier by which the target is uniquely identifiable. The component that is performing the stable hash computation may assign an internal, private target identifier, and the target descriptor may also contain an externally assigned target identifier. One of ordinary skill in the art would recognize that the format of the target identifiers and the manner in which the target identifiers are used may vary, and it should be understood that the identifiers merely represent a logical target unit or a physical target unit within a target ID space.

Please amend the specification at page 35, lines 17-28 as indicated:

It is important to note that while the present invention has been described in the context of a fully functioning data processing system, those of ordinary skill in the art will appreciate that the processes of the present invention are capable of being distributed in the form of instructions in a computer readable medium and a variety of other forms, ~~regardless of the particular type of signal-bearing media actually used to carry out the distribution.~~ Examples of computer readable media include media such as EPROM, ROM, tape, paper, floppy disc, hard disk drive, RAM, and CD-ROMs ~~and transmission-type media, such as digital and analog communications links.~~